Table ES-2	Alternatives Comparison Summary	

		Table 20-2 Alternatives Comparison Caminary						
			Waste Disposa	al Alternatives	Transmission System Alternatives			
		Proposed Action	Proposed Action - Waste Disposal in Mine After 10 Years	Alternative - Expand Landfill After 10 Years (Preferred Alternative)	Proposed Action - 3 Circuits of 161kV Transmission	Alternative - Double Circuit 230kV Transmission Line	No Action	
		Roundup Power Project, as proposed	More information would be required for in- mine storage of waste ash with long-wall coal mining method.		161kV would require more circuits, shorter poles and shorter spans between poles than a higher voltage system to transport 750MW	230kV would require fewer circuits and larger conductors, taller poles but wider spans between poles, and different hardware than a lower voltage system to transport 750MW	Generation facility would not be constructed or operated. Transmission System and Waste Storage proposed action or alternatives would not be constructed and operated.	
	Ground Disturbance	208 acres of ground disturbance.	208 acres of ground disturbance	Additional ~70 acres would be disturbed to develop the waste disposal landfill and the road	Use existing roads; would need some new roads and upgrades to existing roads pending railroad spur construction; Ground disturbance on right-of-way (300 feet x 28 miles) for structures and access roads; most disturbance temporary.	Use existing roads; would need some new roads and upgrades to existing roads pending railroad spur construction; fewer circuits than lower voltage would require less labor and materials; Ground disturbance on right-of-way (300 feet x 28 miles) for structures and access roads; most disturbance temporary; Less	Ground disturbance resulting from constructing and operating the generating facility and transmission lines would not occur.	
	Water Resource	Impacts to ground water from in-mine storage of waste unknown; more studies would be required to assess impacts; zero discharge minimizes impacts on ground water resources from wastewater ponds and solid waste landfill	Impacts unknown and will require additional investigation, however could include elevated concentrations of TDS and metals and impacts to spring and well production.	Similar to Proposed Action.	Impacts would occur from access road construction, maintenance activities, and clearing of right-of-way, structure and work areas. Crosses several ephemeral drainages. No perennial streams crossed. Crosses the Hay Basin lakebed.	Similar to Proposed Action.	Water Resource impacts resulting from construction and operation of the generating facility and transmission lines would not occur.	
ıcts	Earth Resources	Soil erosion impacts would be minimal due to control of runoff from the generation site.	Minor soil erosion would result from transport of waste from generating facility to mine site.	Minor soil erosion would result from transport of waste from generating facility to expanded landfill site.	Minor displacement of earth materials. Direct impacts to soils from access roads, and clearing of right-of-way, structure locations and work areas.	Similar to the Proposed Action; slightly less because of fewer expected structures.	Earth Resource impacts resulting from construction and operation of the generating facility and transmission lines would not occur.	
ource Impacts	Biological and Wetland	Loss of ~207 acres of grass/shrubland for wildlife habitat, grazing and agriculture; no impacts to T&E species	No impacts to T&E species	Expanding the landfill would result in additional ~70 acres habitat loss. No impacts to T&E species	No impacts to T&E species	No impacts to T&E species	Biological impacts resulting from construction and operation of the generating facility and transmission lines would not occur.	
Resoul	Cultural Resource	Archaeological site within the plant site would be impacted. 51 cultural resources within 3 miles of the 574-foot chimneys, of which 8 are considered visually sensitive.	Solid waste disposal haul road and conveyor belt could potentially affect a prehistoric lithic scatter.	Could have greater impacts than Proposed Action due to greater ground disturbance.	Three cultural resources identified within or near transmission route.	Similar to the Proposed Action, however the potential to disturb undiscovered resources may be slightly lower due to increased span length.	Cultural Resource impacts resulting from construction and operation of the generating facility and transmission lines would not occur.	
	Visual	Visual impacts to residents and travelers from chimneys.	Low to non-identifiable impacts.	Action, but would result in only low visual resource impacts.	Visual impacts at road crossings and from scattered residences resulting from transmission lines.	Similar to the Proposed Action - Visual impacts at road crossings and from scattered residences resulting from transmission lines.	Visual impacts of constructing and operating the generating facility and transmission lines would not occur.	
	Land Use	Conversion of currently available grazing and agricultural land to heavy industrial use. Recreation use at the plant site would be permanently lost.	Conversion of currently available grazing and agricultural land to heavy industrial use. Recreation use would be permanently lost.	Similar to the Proposed Action.	Crossing of non-irrigated cropland, livestock grazing land, and CRP land.	Similar to the Proposed Action.	Existing land uses would continue. No impacts to land uses from the generating facility and transmission lines would occur.	
	Socioeconomic Benefits	Full economic benefits realized from implementation of the Proposed Action, including tax benefits to Musselshell County and the State of Montana, jobs created during construction and during the life of the project to operate and maintain the generating facility and to mine the coal.	Socioeconomic benefits would result from construction jobs, taxes for government agencies and social services, and longterm jobs from operation and maintenance of the facility.	Similar to the Proposed Waste Disposal - Socioeconomic benefits would result from construction jobs, taxes for government agencies and social services, and long-term jobs from operation and maintenance of the facility.	Socioeconomic benefits would result from construction jobs, taxes for government agencies and social services, and long-term jobs from operation and maintenance of the facility.	Similar to the Proposed Transmission Line System - Socioeconomic benefits would result from construction jobs, taxes for government agencies and social services, and long-term jobs from operation and maintenance of the facility.	Musselshell County and the State of Montana would not gain the tax benefits, jobs, and other socioeconomic benefits from operating the generation facility and transmission line, and would not gain the jobs and economic benefits from operating the Bull Mountain Mine to support the fuel needs of the generating facility.	